

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: William McFarland, et al : Group  
Serial No: 10/607,992 : Art Unit # 2661  
Filed: 30 June 2003 : Examiner  
Title: SCALABLE COMMUNICATION SYSTEM : Unknown  
USING OVERLAID SIGNALS AND MULTI-CARRIER FREQUENCY COMMUNICATION



INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Applicants wish to make the following art references of record in the above-identified Patent Application pursuant to 37 C.F.R. §§ 1.97 and 1.98, and to the Duty of Disclosure set forth in 37 C.F.R. § 1.56.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject Patent Application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search was made or that no other material information, as defined in 37 C.F.R. § 1.56(b), exists.

The cited U. S. Patent references are:

<u>Ref. No.</u>	<u>Pat./Publication No.</u>	<u>Iss./Pub. Date</u>	<u>Inventor(s)</u>
A	5,261,118	11/09/1993	VANDERSPOOL, II, et al.
B	5,400,322	03/21/1995	HUNT, et al.
C	5,499,236	03/12/1996	GIALLORENZI, et al.
D	5,506,867	04/09/1996	KOTZIN, et al.
E	5,742,527	04/21/1998	RYBICKI, et al.
F	5,870,427	02/09/1999	TIEDEMANN, JR., et al.
G	5,914,932	06/22/1999	SUZUKI, et al.
H	5,966,644	10/12/1999	SUZUKI
I	6,005,893	12/21/1999	HYLL
J	6,044,067	03/28/2000	SUZUKI
K	6,125,103	09/26/2000	BAUML, et al.
L	6,160,820	12/12/2000	ISAKSSON, et al.
M	6,215,778	04/10/2001	LOMP, et al.
N	6,628,673	09/30/2003	McFARLAND, et al.

Cited publications are:

<u>Ref. No</u>	<u>Description</u>
O	HERMANN ROHLING, et al., "Performance Comparison of Different Multiple Access Schemes for the Downlink of an OFDM Communication System", IEEE 47 <sup>th</sup> Vehicular Technology

Conference, May 04, 1997, pg. 1365-1369, Phoenix Arizona

- P ANDREW VITERBI, "The Orthogonal-Random Waveform Dichotomy for Digital Mobile Personal Communication", IEEE Personal Communications, 1994, pg. 18-23
- Q GREGORY POTTIE, et al., "Channel Coding Strategies for Cellular Radio", IEEE International Symposium on Information Theory, Jan. 17, 1993, San Antonio Texas
- R HAKAN OLOFSSON, et al., "Interference Diversity Gain in Frequency Hopping GSM", IEEE 45<sup>th</sup> Vehicular Technology Conference, Jul. 25, 1995, Chicago, Illinois
- S J.C-I CHUANG, "An OFDM-Based System with Dynamic Packet Assignment and Interference Suppression for Advanced Cellular Internet Service", IEEE GLOBECOM 1998 Sydney Conference record 2 of 6, Nov. 08, 1998, Sydney Australia
- T WOLFGANG EBERIE, et al., "Design Aspects of an OFDM Based Wireless LAN with Regard to ASIC Integration", Braunschweig Germany, Sept. 16-17, 1997
- U SHINSUKE HARA, et al., "Transmission Performance Analysis of Multi-Carrier Modulation in Frequency Selective Fast Rayleigh Fading Channel", Wireless Personal Communications 2, 1996, pg. 335-356 Kluwer Academic Publishers, Netherlands
- V CLACK D. THOMPSON, "Fourier Transforms in VLSI", IEEE Transactions on Computers, Vol. C-32, No. 11, Nov. 1983, pg. 1047-1057
- W HERMANN ROHLING, et al., "Comparison of Multiple Access Schemes for an OFDM Downlink System", Multi-Carrier Spread-Spectrum, 1997, pg. 23-30, Kluwer Academic Publishers, Netherlands
- X ALVIN M. DESPAIN, "Very Fast Fourier Transform Algorithms Hardware for Implementation", IEEE Transactions on Computers, Vol. C-28, No. 5, May 1979, pg. 333-341

Y

HAMID ALIKHANI, et al., "BDMA Band Division Multiple Access, A New Air-Interface for 3<sup>rd</sup> Generation Mobile System, UMTS, in Europe", PG. 482-488

This Information Disclosure Statement is being filed more than three months subsequent to the Filing Date of the subject Patent Application, but before the mailing of the first Office Action.

A Form PTO-1449 and copies of the references are submitted along with this document. It is requested that the Examiner consider the references and make them of record in the above-referenced Patent Application.

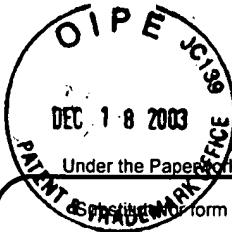
Respectfully submitted,  
For: ROSENBERG, KLEIN & LEE



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PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031  
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PATENT & TRADEMARK OFFICE  
Information Disclosure Statement Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	10/607,992
Filing Date	Jun. 30, 2003
First Named Inventor	WILLIAM McFARLAND et al.
Art Unit	2661
Examiner Name	

Attorney Docket Number MR2929-7/C

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
A	US- 5,261,118		Nov. 09, 1993	VANDERSPOOL, II et al.	
B	US- 5,400,322		Mar. 21, 1995	HUNT et al.	
C	US- 5,499,236		Mar. 12, 1996	GIALLORENZI et al.	
D	US- 5,506,867		Apr. 09, 1996	KOTZIN et al.	
E	US- 5,742,527		Apr. 21, 1998	RYBICKI et al.	
F	US- 5,870,427		Feb. 09, 1999	TIEDEMANN Jr. et al.	
G	US- 5,914,932		Jun. 22, 1999	SUZUKI et al.	
H	US- 5,966,644		Oct. 12, 1999	SUZUKI	
I	US- 6,005,893		Dec. 21, 1999	HYLL	
J	US- 6,044,067		Mar. 28, 2000	SUZUKI	
K	US- 6,125,103		Sep. 26, 2000	BAUML et al.	
L	US- 6,160,820		Dec. 12, 2000	ISAKSSON et al.	
M	US- 6,215,778		Apr. 10, 2001	LOMP et al.	
N	US- 6,628,673		Sep. 30, 2003	McFARLAND et al.	
	US-				

**FOREIGN PATENT DOCUMENTS**

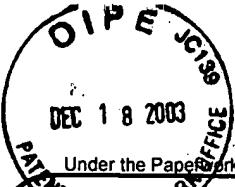
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner Signature	Date Considered
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Substitute Reference 1449/PTO

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Sheet

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of

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Attorney Docket Number

MR2919-7/C

**NON PATENT LITERATURE DOCUMENTS**

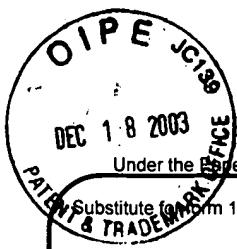
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
O	O	HERMANN ROHLING et al., "Performance Comparison of Different Multiple Access Schemes for the Downlink of an OFDM Communication System", IEEE 47th Vehicular Technology Conference, May 04, 1997, pg. 1365-1369, Phoenix Arizona	
P	P	ANDREW VITERBI, "The Orthogonal-Random Waveform Dichotomy for Digital Mobile Personal Communication", IEEE Personal Communications, 1994, pg. 18-23	
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V	V	CLACK D. THOMPSON, "Fourier Transforms in VLSI", IEEE Transactions on Computers, Vol. C-32, No. 11, Nov. 1983, pg. 1047-1057	
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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet 3 of 3 Examiner Name Attorney Docket Number MR2919-7/C

## **NON PATENT LITERATURE DOCUMENTS**

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